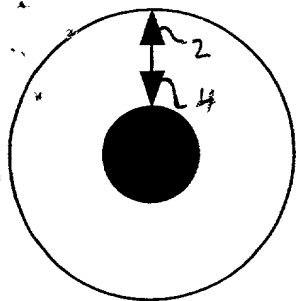


FIG. 1(a)



Empty

FIG. 1(b)

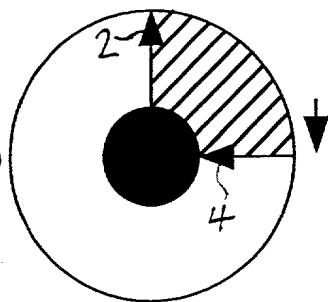


FIG. 1(c)

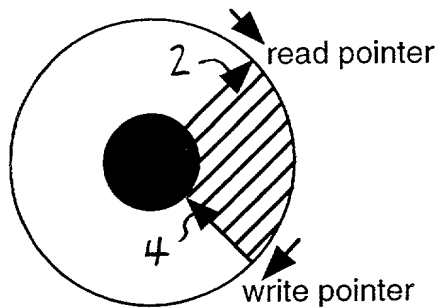
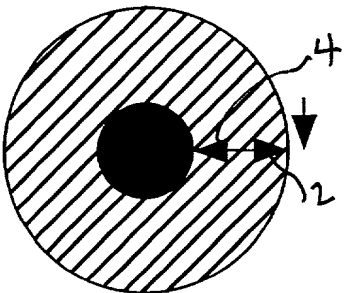


FIG. 1(d)



Full

FIG. 2(a)

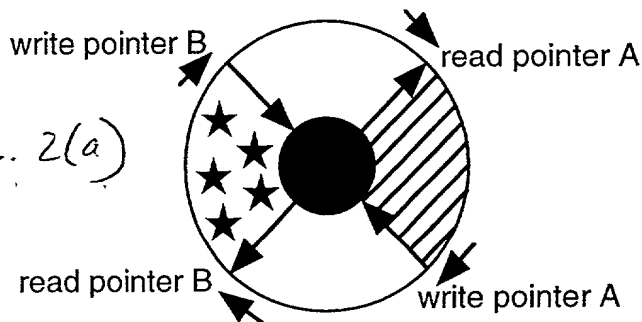


FIG. 2(b)

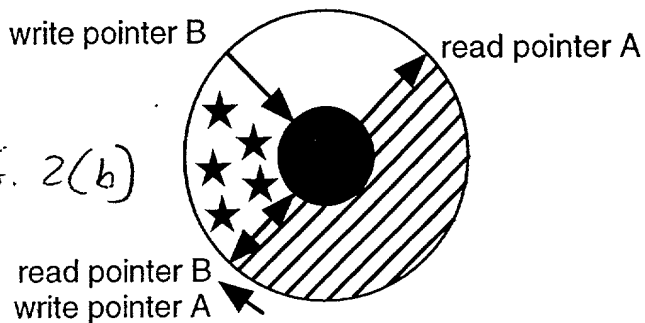
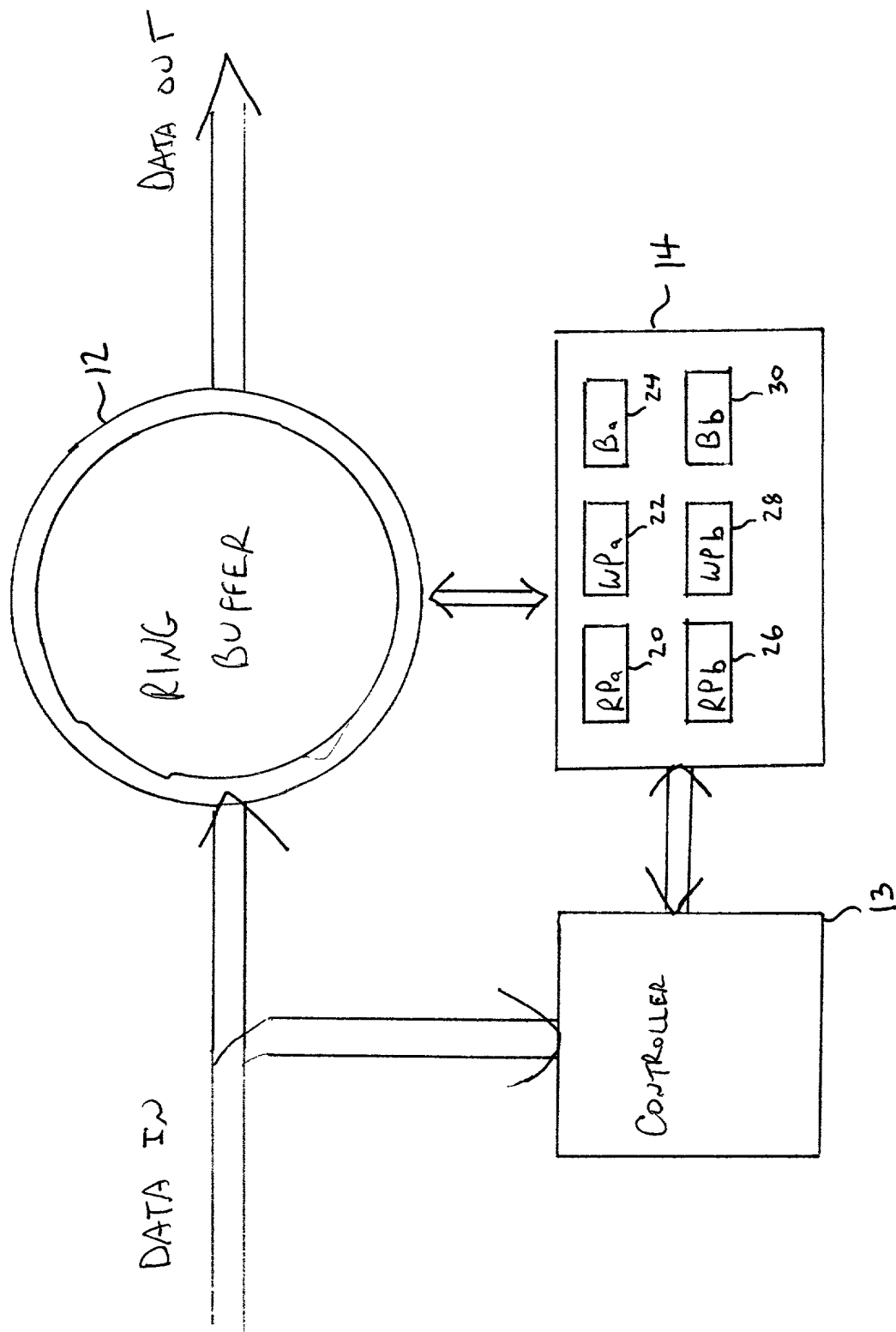


FIG. 3



boundary B, read pointer A,  
and write pointer A

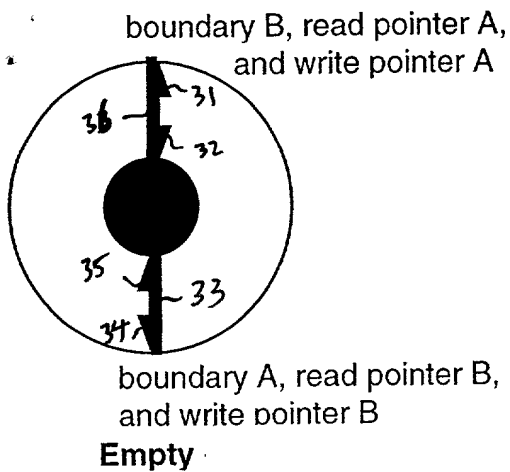
36 31

32 35

33 34

boundary A, read pointer B,  
and write pointer B

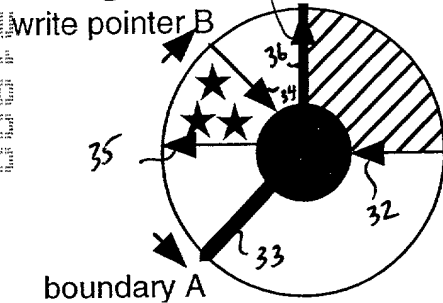
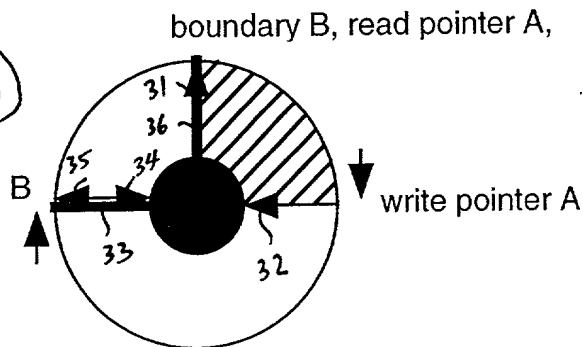
Empty



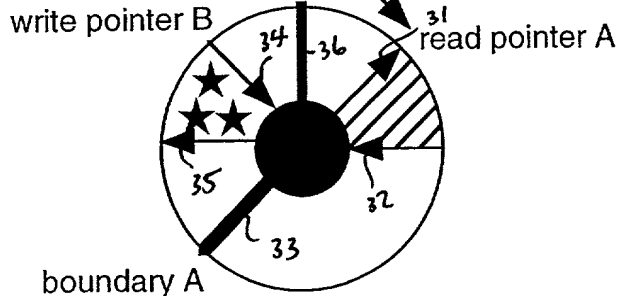
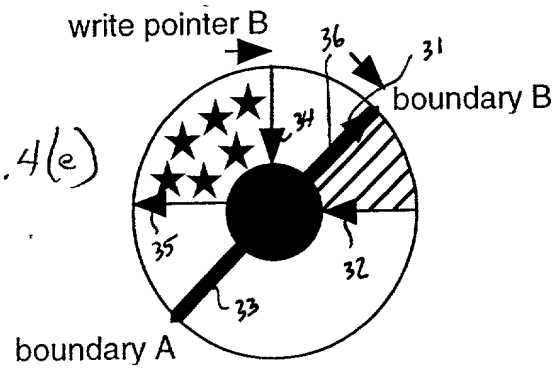
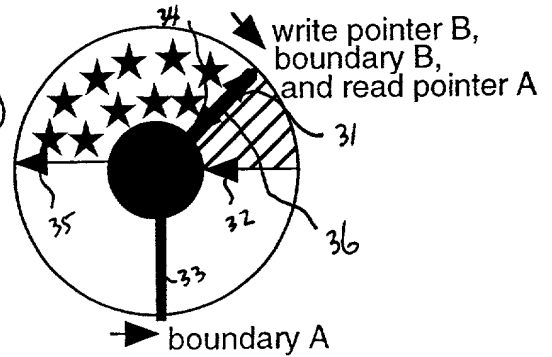
boundary B, read pointer A,

write pointer A

The diagram shows a disk layout with a central black circle. A horizontal line passes through the center. On the left, a vertical line segment is labeled 'B' with an upward arrow. On the right, a vertical line segment is labeled 'write pointer A' with a downward arrow. A horizontal line segment on the right is labeled '32'. A horizontal line segment on the left is labeled '33'. A horizontal line segment on the left is labeled '34'. A horizontal line segment on the left is labeled '35'. A horizontal line segment on the left is labeled '36'. A horizontal line segment on the left is labeled '31'.



A diagram of a circular buffer represented as a circle with a central black dot. The circle is divided into segments by radial lines. A thick black line, labeled 33, represents the boundary between the current and previous frame. A thick grey line, labeled 32, represents the boundary between the current and next frame. A thick white line, labeled 31, represents the boundary between the previous and next frame. A thick black line, labeled 34, represents the boundary between the current and previous frame. A thick grey line, labeled 35, represents the boundary between the current and next frame. A thick white line, labeled 36, represents the boundary between the previous and next frame. The segments are labeled: 'write pointer B' (top left), 'read pointer A' (top right), and 'boundary A' (bottom left). The segments are numbered 31, 32, 33, 34, 35, and 36.

[illegible][illegible]

$f(g, 4(g))$

boundary B,  
and read pointer A

write pointer B

boundary A

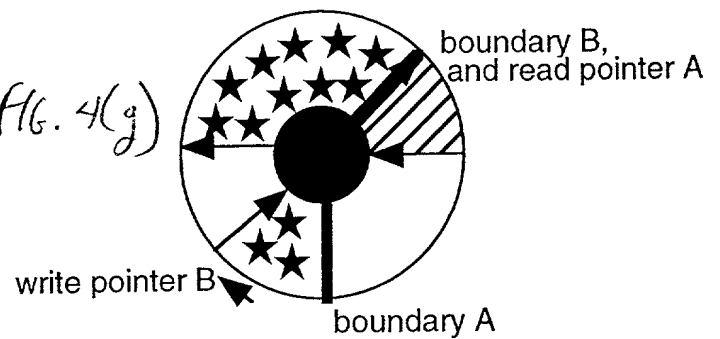


FIG. 4(h)

Diagram illustrating a circular buffer structure. The buffer is represented by a circle divided into segments. A central black circle represents the origin. The buffer is divided into segments by two boundaries: boundary A (bottom) and boundary B (top-right). The segments are labeled as follows:

- read pointer B (left)
- read pointer A (right)
- write pointer B (bottom-left)
- write pointer A (bottom-right)

The segments are filled with stars, indicating data stored in the buffer. The segments between the read and write pointers are shaded with diagonal lines, indicating the current state of the buffer.

